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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,398	05/19/2000	Ruslan Belkin	15437-0113	7210

29989 7590 05/20/2004

HICKMAN PALERMO TRUONG & BECKER, LLP  
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EXAMINER
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HALIM, SAHERA

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 05/20/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No

09/574,398

Applicant(s)

BELKIN ET AL.

Examiner

SAHERA HALIM  
~~Jack P. Nguyen~~

Art Unit

~~2154~~ 2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/2/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 6-9, 15-18, 24-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-9, 15-18 and 24-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 6, 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts et al., U.S. Pat. No. 6,076,108 (hereinafter Courts) in view of Hickman et al U.S. Pat. No. 6,564,252 (hereinafter Hickman).**

3. Regarding claim 6, Courts discloses a computer system, comprising (abstract):  
a memory-mapped file; (abstract; global session server (212));  
a first server process, said first server process servicing a first request pertaining to a particular session, said first server process storing session information pertaining to said particular session in said memory-mapped file; and a second server process, said second server process servicing a second request pertaining to said particular session, said second server process accessing said session information from said memory mapped file and using said session information to service said second request (abstract, Courts et al. discloses receiving a request from a user that initiates a user session with the web system and processing the request to provide a web page to the user. Session data (220) representing a state of the user session is

stored in memory in a global session server (212). Then, for each subsequent request associated with the user session, the subsequent request is received, and the session data (220) is retrieved from the global session server (212). The subsequent request is then processed using the session data (220) to provide a web page to the user, and the session data (220) is changed to reflect the processing. The session data (220) is then updated in the global session server (212). The global session (212) thereby stores session data (220)...).

Courts does not disclose wherein said memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of memory space of said second server process.

However, Hickman discloses wherein said memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of memory space of said second server process (Fig. 3 and col. 5, line 44 – col. 6, line 27). It would have been obvious for a person having ordinary skill in the art at the time of the invention to combine the teachings of Courts and Hickman to increase reliability and scaling of the system and to eliminate time consuming path lookups (col. 1 line 63 – col. 2, line 24).

4. Claims 15 and 24 have similar limitations to claim 1, therefore, they are rejected under the same rational.

5. Regarding claims 9,18, and 27, Courts discloses said second server process sets a busy indicator associated with said session information to indicate that said session information is currently in use, thereby preventing any other server process from using said session information

while said second server process is using said session information (col. 7, line 59 – col. 8, line 54 and col. 9, line 30 – 52; Courts discloses locking the session data to indicate that session information is currently in use and to prevent concurrent access).

6. Reference to claim 28, 31, and 34, Courts teaches the system of claim 1, wherein said second server process updates said session information to derive a set of updated session information, and wherein said second server process stores said updated session information in said shared storage (abstract, Courts et al. discloses session data (220) representing a state of the user session is stored in memory in a global session server (212). Then, for each subsequent request associated with the user session, the subsequent request is received, and the session data (220) is retrieved from the global session server (212). The subsequent request is then processed using the session data (220) to provide a web page to the user, and the session data (220) is changed to reflect the processing. The session data (220) is then updated in the global session server (212). The global session (212) thereby stores session data (220)...).

**7. Claims 29, 30, 32, 33, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts in view Hickman and further in view of Bellemore et al., U.S. Pat. No. 6,088,728 (hereinafter Bellemore).**

8. Regarding claims 29, 32 and 35 Courts and Hickman do not disclose updated session information replaces said session information in said shared storage. However, this limitation is well known in the art as evidenced by Bellemore. Bellemore discloses updated session

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information replaces said session information in said shared storage (col. 9 line 9 – 20). It would have been obvious for a person having ordinary skill in the art at time of the invention to modify Courts by Bellemore in order to save memory space and increase processing time.

9. Regarding claims 30, 33, and 36, Courts discloses a third server process, said third server process servicing a third request pertaining to said particular session, said third server process accessing said updated session information from said shared storage and using said updated session information to service said third request (abstract, Courts et al. discloses receiving a request from a user that initiates a user session with the web system and processing the request to provide a web page to the user. Session data (220) representing a state of the user session is stored in memory in a global session server (212). Then, for each subsequent request associated with the user session, the subsequent request is received, and the session data (220) is retrieved from the global session server (212). The subsequent request is then processed using the session data (220) to provide a web page to the user, and the session data (220) is changed to reflect the processing. The session data (220) is then updated in the global session server (212). The global session (212) thereby stores session data (220). ...)

**10. Claims 7, 8, 16, 17, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts in view Hickman and further in view of Bayeh et al., U.S. Pat. No. 6,098,093 (hereinafter Bayeh).**

11. Regarding claim 7, 16 and 25, Courts and Hickman fail to teach said first server process stores said session information into said memory mapped file in the form of a serialized byte stream. Nonetheless Bayeh discloses that this limitation is well known in the art. Bayeh discloses server process stores said session information into said memory mapped file in the form of a serialized byte stream (col. 4, line 40 – 50). It would have been obvious for a person having ordinary skill in the art at the time of the invention to store session information in the form of a serialized byte stream in order to prevent collision of retrieval requests with the update requests and thereby preventing the return of invalid or corrupted session state information to the requesting processes.

12. Regarding claims 8, 17, and 26, Courts and Hickman do not teach said second server process de-serializes said serialized byte stream prior to using said session information to service said second request. Bayeh discloses session information is stored in the form of in a serialized form (col. 4, line 40 – 50). Bayeh does not explicitly disclose the de-serialization of data prior to using the information to service a second request. However, de-serializing is the opposite of serializing and before storing the information to the storage in serialize form, the information is in de-serialize form to be utilized for addressing a request. Therefore, it would have been obvious for one having ordinary skill in the art at the time of the invention to de-realize session state information in order to use the information to service the second request.

***Response to Arguments***

13. Applicant's arguments filed on March 2, 2004 have been fully considered but they are not persuasive.

14. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the sessions are maintained on a centralized, shared basis and not process-specific basis, avoiding the inefficiencies of storing and retrieving session information via requests to and responses from a server, permitting processes to continue to read and write session information to their own memory spaces etc) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

15. In response to applicant's argument that the reference fails to teach memory-mapped file and that the partition map of Hickman is different that the memory-mapped file, a partition map specifies that a portion of a certain process utilizes a portion of memory. This description meets the limitations of the claim. There is no specific definition of a memory map file in the claim. Reading the claim as broad as possible the references presented by the Examiner address all the limitations of claim 6.

16. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).



17. In response to the applicant's argument that the references do not teach wherein the memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of a memory space of said second server process, Hickman discloses wherein said memory-mapped file is mapped to at least a portion of a memory space of said first server process and at least a portion of memory space of said second server process (Fig. 3 and col. 5, line 44 – col. 6, line 27). It would have been obvious for a person having ordinary skill in the art at the time of the invention to combine the teachings of Courts and Hickman to increase reliability and scaling of the system and to eliminate time consuming path lookups (col. 1 line 63 – col. 2, line 24).

### ***Conclusion***

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

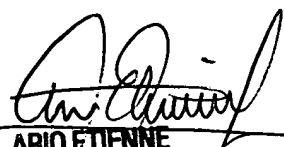
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sahera Halim whose telephone number is (703) 305-8054. The examiner can normally be reached on M-F from 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sahera Halim  
Patent Examiner  
Art Unit: 2157

May 17, 2004

  
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